

## **APPLICATION GUIDELINES ANALYSIS OF ASSURED WATER SUPPLY**

The "Analysis of Assured Water Supply" is intended for unplatted subdivisions only. The issuance of an Analysis of Assured Water Supply will not allow for plat approval by the local platting entity, nor will it allow for the issuance of a public report by the Department of Real Estate. The Analysis of Assured Water Supply allows the developer to demonstrate that the requirements for a Certificate of Assured Water Supply can be met once the land is subdivided and platted.

**NOTE:** Where insufficient space exists on the form, please submit attachments and reference them on the form.

### **PART A - GENERAL INFORMATION**

**Item 1:** Enter the full name of the development as it will be submitted to the platting entity and the Arizona Department of Real Estate.

**Item 2:** List the legal description of the development, the county and the AMA.

**Item 3:** Identify the owner of the property upon which the development will be built. "Owner" means a person who holds a sufficient ownership interest in the land described in the certificate application to allow for the sale or lease of the property immediately upon approval of the certificate and plat, and the issuance of the public report. The owner must be the same owner who will be reported to the platting entity and the Arizona Department of Real Estate. If the owner is a person other than an individual, such as a corporation, partnership or trust, include a statement naming the type of legal entity and listing the interest and extent of such interest of each principal in the entity.

**Item 4:** Identify the water provider which will be serving the development (unless the development is a dry lot subdivision). The water provider must be the same entity which signs the notice of intent to serve.

**Item 5:** Identify any technical consultant(s) used in preparing the application or any supporting documents.

**Item 6:** Indicate the person to be contacted for questions regarding this application.

### **PART B - WATER DEMAND INFORMATION**

**Item 1:** Include a copy of the development plan covering the area for which Certificate(s) of Assured Water Supply may later be requested.

**Item 2:** List the number of lots and the aggregate acreage for both residential and non-residential lots or parcels.

**Item 3a:** Indicate the year that the development will be built out (i.e active water service connections exist for at least 90 percent of all lots).

**Item 3b:** Indicate the demand for each year through the year build-out occurs (specify the years). Include water used for construction purposes, and account for distribution system losses. Demand calculations must reflect as accurately as possible the actual expected use rates. Estimates must be calculated on the basis of sound water use factors, or as an alternative, the water use records of lots with similar characteristics in the same area may be used. If actual water use records are used, at least three consecutive years of record should be analyzed. Demand calculations must assume full occupancy. (The Department's AMA offices can provide assistance in calculating demand.)

**Item 4a:** List single family and multi-family units separately. Single family includes detached dwellings and mobile homes on individual lots. Multi-family includes apartments, townhomes, condominiums and mobile homes in mobile home parks. Persons per household (PPH) figures should be reflective of the service area of the water provider who will serve the development, unless more accurate information is available. The PPH figure should assume full occupancy. Service area PPH figures are available through the Department's AMA offices. Demand figures should account for distribution system losses.

**Item 4b:** Indicate the assumptions used to calculate the per-housing unit demand. (Contact the Department if assistance is needed.) Please indicate the source of your estimate.

**Item 5a:** List the demand associated with each non-residential use. "Turf-related facilities" includes only those facilities greater than 10 acres in size which are subject to specific acre-foot per acre allotments. "Other" non-residential uses may include "Commercial" (stores, offices, recreational centers etc.), or uses such as irrigation of common areas, drainage ways and rights of way.

**Item 5b:** Indicate the assumptions used to calculate non-residential demand. (Contact the Department if assistance is needed.)

**Item 6 - (General information relating to Management Plan conservation requirements)** Requirements for water providers include meeting gallon per capita per day (GPCD) targets which have been calculated for each provider, and "individual user" requirements for deliveries to new large cooling users, turf-related facilities, and landscaping in public rights of way. In addition, large providers (those that serve more than 250 acre-feet per year) must limit lost and unaccounted for water to no more than 10 percent, and small providers to not more than 15 percent. While developers are not specifically subject to these requirements, water use by new developments can affect the ability of the provider to meet its requirements.

Water use models for new residential development, which assume water conservation practices and devices, were developed by the Department and used in determining the provider's GPCD goals. These models, which may be used as guidance in estimating conservation-oriented demands, are summarized below:

**MODEL WATER USE RATES FOR NEW RESIDENTIAL DEVELOPMENT  
BY ACTIVE MANAGEMENT AREA  
(From Third Management Plan)**

AMA	Phoenix	Tucson	Santa Cruz	Pinal	Prescott
<b>Single Family Demand</b> <b>Interior:</b> <b>Exterior:</b>	57 GPCD 178 GPHUD <sup>1</sup>	57 GPCD 118 GPHUD	57 GPCD 107 GPHUD	57 GPCD 149 GPHUD	57 GPCD 75 GPHUD
<b>Multi-Family Demand</b> <b>Interior:</b> <b>Exterior:</b>	57 GPCD 77 GPHUD	57 GPCD 21 GPCD	57 GPCD 26 GPHUD	57 GPCD 77 GPHUD	57 GPCD 58 GPHUD

NOTE: The Arizona Water Efficient Plumbing Act of 1992 requires installation of fixtures that are compatible with the Department's interior water use models.

<sup>1</sup> Gallons per Housing Unit per Day.

**Item 6a:** For the municipal or county jurisdiction within which the development is located, list any water conservation ordinances and briefly describe the sections that apply to the development.

**Item 6b:** Indicate if the proposed development will incorporate Conditions, Covenants and Restrictions (CC&R's) or other conditions which will limit exterior water demand.

**Item 6c:** Refer to the Department's low water use plant list for a listing of acceptable plants for public rights of way served by municipal water providers.

**Item 6d:** List measures that will be taken to ensure that lost water will be kept within limits required of the water provider's system (10 percent if served by a large provider, 15 percent if served by a small provider). Lost water includes line breaks, meter under-registration and seepage through transmission lines.

**Item 6e.** List any other conservation actions not previously mentioned that apply to the development.

## PART C - WATER SUPPLY INFORMATION

**Item 1:** Indicate "yes" if the owner has requested membership in the Central Arizona Groundwater Replenishment District (CAGRD) and expects to be a member upon issuance of a Certificate of Assured Water Supply. For further information regarding membership in the CAGRD, contact the Central Arizona Water Conservation District (phone (623) 869-2672).

**Item 2a:** Indicate whether the development will receive water through a central distribution system from a water provider, or if the subdivision will be served by individual wells.

**Item 2b:** This form, included in the application packet, must be completed if the development will be served by a water provider. It need not be completed if the development is a dry lot subdivision.

**Item 2c:** Complete this item only if the development will receive water from a company regulated by the Arizona Corporation Commission **and** the company is extending its Certificate of Convenience and Necessity to include the development.

**Item 3:** If a water distribution system has not yet been constructed, the developer's financial capability of constructing the system will be verified by the local platting entity.

**Item 4a:** A storage facility includes any surface or subsurface impoundment to store surface water or effluent for distribution within the development. A treatment facility refers to a plant used to treat surface water or effluent for distribution within the development.

**Item 4b:** The statement of capacity should specify treatment facilities in terms of millions of gallons per day (MGD), and storage capacity in terms of acre-feet.

**Item 4c:** Attach a copy of the performance bond as evidence of the financial capability to construct or modify these facilities.

**Item 5:** The location of the distribution system and any on-site storage and treatment works may be incorporated into the development plat or submitted as a separate map.

**Item 6:** The referenced water quality study must describe the types of contaminants and analyze the possible migration of the water to identify any potential effects on the available groundwater. If the poor quality water is likely to be withdrawn, a brief description of potential treatment or remediation methods must be specified. Applicants may use any existing contaminant transport models which have been developed for Superfund and WQARF sites, or simplified groundwater velocity estimates may be used. This study should be combined with other related hydrologic studies discussed under Item 7. The Department's guidelines for hydrologic studies provide more details.

**Item 7:** Attach and reference any supporting studies or other documents indicated in the table. General guidance for water sources and volumes, hydrologic studies, backup supply plans and drought response plans are provided below. If more detail is required to demonstrate sources and types of water, an alternative table may be submitted (in a clear and concise format).

### Water Sources and Volumes

The 100 year volume should include the total water from each source expected to be used over the 100 year period, regardless of the actual or expected term of usage. For example, the 100 year volume for a 30 year contract for 200 acre feet of effluent is 6,000 acre-feet.

Surface Water, CAP/Colorado River Water and Effluent Directly Delivered: Include the amounts from each of these sources that will be directly delivered. For purposes of this table "directly delivered" includes amounts stored and recovered in the same calendar year. Amounts stored in one year and recovered in a later year should be accounted for under "Existing Long-Term Storage Credits" or "Anticipated Long-Term Storage Credits."

Groundwater: The figure for groundwater could include the basic groundwater allocation (which varies between AMAs) plus: 1) any credits for extinguishment of grandfathered rights; 2) incidental recharge (figured at 4 percent of total demand); and 3) for members of the Central Arizona Groundwater Replenishment District, any groundwater which is to be replenished by the District on the member's behalf. (If the applicant intends to demonstrate an Assured Water Supply solely on the basis of membership in the District, the amount indicated in the "100 year volume" column should equal total projected demand for the

100 year period.)

Long-Term Storage Credits (Existing or Anticipated): Do not include water stored and recovered in the same year (this water should be accounted for under the origin source).

### **Hydrologic Studies**

Hydrologic studies involve a site-specific evaluation of surface water and groundwater characteristics including water levels, water decline rates, flow rates, flow direction and water quality. These studies provide for conclusions regarding the impact of the proposed withdrawals or diversions, and the quantity and quality of water available. The various studies referenced in the "source of supply" table for appropriate supplies should be combined into one comprehensive hydrologic report.

The rules require that a study must describe the hydrology of the "affected area" using a "method of analysis approved by the director." The "affected area" for a development is the area delineated by the boundaries of the proposed development plus: 1) any nearby areas where the depth to water criteria may be exceeded; and 2) any nearby areas containing water that does not meet state water quality standards. "Method of analysis approved by the director" refers to guidelines for hydrologic studies prepared by the Department's Hydrology Division, or an alternative method that has been presented to and approved by the Department. Detailed hydrologic study guidelines are available through the Hydrology Division (417-2448).

For purposes of determining physical availability of groundwater, the following factors must be considered:

- the groundwater allowance
- incidental recharge
- credits for extinguished grandfathered rights
- long-term storage credits (regardless of the origin source)
- any water stored and recovered in the same year when recovery occurs outside of the area of hydrologic impact
- all groundwater which is subject to replenishment by the Central Arizona Groundwater Replenishment District.

### **Backup Water Supply**

Backup water supplies must be demonstrated if:

- 1) The proposed source of water is surface water (not including CAP or Colorado River water) and the applicant wishes to have the Department calculate the quantity of water annually available for the proposed use at 100 percent of the median flow of the source (instead of 120% of firm yield of the source);
- 2) The proposed source of water is a CAP subcontract (other than a non-declining, long-term municipal and industrial subcontract or a lease for Indian priority CAP water) and the applicant wishes to have the Department calculate the quantity of water annually available for the proposed use at 100 percent of the subcontract amount (instead of a lesser amount to be determined by the Director);
- 3) The proposed source of water is Colorado River water based on a contract which is less reliable than CAP municipal and industrial water, and the applicant wishes to have the Department calculate the quantity of water annually available for the proposed use at 100 percent of the contract amount (instead of a lesser amount to be determined by the Director).

A backup water supply may be demonstrated through one or more of the following:

- A drought response plan (see guidelines below)
- Recharge credits
- A contract for water with the Central Arizona Groundwater Replenishment District or a county water augmentation authority
- Evidence that the applicant is a member of the Central Arizona Groundwater Replenishment District or a county water augmentation authority
- Evidence of other backup supplies which are physically, continuously, and legally available.

## **Drought Response Plan**

A Drought Response Plan is one of five options available for demonstrating a backup supply of water. In addition, a Drought Response Plan is one of several means to support the demonstration of continuous physical availability of surface water, Central Arizona Project water or Colorado River water where insufficient storage facilities exist.

The Drought Response Plan should describe a variety of conservation and augmentation measures which the provider will employ during a water supply shortage. The plan may include:

- An identification of priority water uses consistent with appropriate public policy
- A description of sources of emergency water supplies
- An analysis of the potential use of water pressure reduction
- Plans for public education and voluntary water use reduction
- Plans for water use bans, restrictions and rationing
- Plans for water pricing and penalties for excess water use
- Plans for coordination with other cities, towns and private water companies
- Any other appropriate measures.

The Drought Response Plan should describe any physical structures and reference any current contracts, agreements or special authorizations necessary to implement the measures.

**Item 8:** Water withdrawn and used (or exchanged) pursuant to these exemptions will not be accounted for against the groundwater allowance. However, a separate application must be filed to claim these exemptions. Contact the Department for more information.

**Item 9:** The Letter of Water Availability is an instrument through which physical availability of water may have been previously determined.

**Item 10:** If a water exchange is involved, please attach the entire agreement.

**Item 11:** If the applicant has extinguished grandfathered groundwater rights after the effective date of the rules, and the credits are to be included in the development's groundwater allocation, please submit evidence of the extinguished rights.

## **PART D - FEES**

Make checks payable to the Arizona Department of Water Resources.

**Signature:** Print the name of the owner and have the owner sign and date the application. If the development is owned by a sole proprietor, the individual owner must sign. If the development is owned by a corporation, partnership or trust, an authorized corporate officer, partner, or trustee must sign.

\* \* \*

For more information:

- General assistance:  
Assured Water Supply Program Manager  
(602) 417-2465
- Assistance with Groundwater Replenishment District membership:  
Manager, Central Arizona Groundwater Replenishment District  
(through the Central Arizona Water Conservation District)  
(623) 869-2672
- Assistance with calculating demand:  
Phoenix AMA – (602) 417-2465  
Tucson AMA - (520) 770-3800  
Pinal AMA - (520) 836-4857  
Prescott AMA - (928) 778-7202  
Santa Cruz AMA - (520) 761-1814
- Hydrologic studies  
Water Supply Group (602)417-2448
- Financial Capability (602) 417-2465
- Water Quality - Superfund/WQARF Remedial Actions  
Water Quality Assurance Program (602) 417-2473

<b>ARIZONA DEPARTMENT OF WATER RESOURCES</b> OFFICE OF ASSURED AND ADEQUATE WATER SUPPLY 500 NORTH THIRD STREET PHOENIX, ARIZONA 85004-3903 (602) 417-2465 FAX (602) 417-2467	DATE RECEIVED:
	APPLICATION NO:

## APPLICATION FOR AN ANALYSIS OF ASSURED WATER SUPPLY

**NOTE:** Where insufficient space exists on this form, please submit attachments and reference them on the form.  
Refer to application guidelines for assistance in completing this form

**IMPORTANT NOTE:** This application is intended to be used for master plan communities where one owner will be developing the entire master plan. If six or more parcels, any one of which will be less than 36 acres, will be sold, then you must complete an application for a Certificate of Assured Water Supply.

### PART A - GENERAL INFORMATION

1. Name of Development: \_\_\_\_\_
2. Location: \_\_\_\_\_  

Township
Range
Section(s)County
AMA
3. Owner Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_
4. Water Provider: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_
5. Consultant Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_
6. Primary Contact: Name: \_\_\_\_\_ Phone: \_\_\_\_\_  
Address: \_\_\_\_\_

### PART B - WATER DEMAND INFORMATION

1. Include a map of the proposed development plan, and reference as an attachment: \_\_\_\_\_
2.
  - a. Estimated number of residential lots: \_\_\_\_\_ Lots
  - b. Residential lot acreage (total): \_\_\_\_\_ Acres
  - c. Non-residential acreage (total): \_\_\_\_\_ Acres

3. a. Projected build-out year for entire plat: \_\_\_\_\_
- b. Indicate total expected demand for each year (through the build-out year only):

Calendar Year	Demand (AF)	Calendar Year	Demand (AF)	Calendar Year	Demand (AF)	Calendar Year	Demand (AF)
1. 200__		6.		11.		16.	
2. 200__		7.		12.		17.	
3.		8.		13.		18.	
4.		9.		14.		19.	
5.		10.		15.		20.	

4. a. Provide the following residential demand information (refer to guidelines for acceptable methods):

	1	2	3	4	5	6
Category	Average Persons per Housing Unit	Gallons per Person per Day	Demand per Housing Unit per Year (AF/YR)	Number of Housing Units	Total Expected Demand per Year (AF/YR)	100 Year Demand (AF/YR)
Single family						
Multi-family						

b. Indicate the source of the "persons per household" figure(s): \_\_\_\_\_

c. Indicate the source of the "demand per housing unit" figure(s): \_\_\_\_\_

5. a. Will there be any water demands within this master plan or subdivision that are not accounted for within the residential water use rates? Possible non-residential demands include, but are not limited to golf courses, common areas, apartment units, schools, parks, or community centers. \_\_\_\_\_ Yes \_\_\_\_\_ No

If "yes", please provide the following non-residential demand information:

Non-Residential Water Use Category:	Estimated date of completion	Total demand (AF/YR)
Turf-related facilities:		
Other (specify):		

b. Describe assumptions used in this table: \_\_\_\_\_



6. Conservation requirements have been prescribed for water providers through the Management Plan for each active management area. The following information is needed to support provider efforts to meet these requirements.
- a. List current and proposed conservation ordinances which apply to this development: \_\_\_\_\_  
\_\_\_\_\_
  - b. Will the development incorporate CC&Rs or other restrictions to limit landscape water use? ☐ Yes ☐ No
  - c. Will landscaping in public rights of way associated with this development conform to the Department's Low Water Use Plant List? ☐ Yes ☐ No
  - d. Describe steps to be taken to limit distribution system losses to those prescribed by the Management Plan:  
\_\_\_\_\_  
\_\_\_\_\_
  - e. Generally describe any other current or proposed conservation practices, rates, fees, restrictions, policies and devices to be utilized within the development to meet the conservation requirements of the Management Plan:  
\_\_\_\_\_  
\_\_\_\_\_

### **PART C - WATER SUPPLY INFORMATION**

- 1. Will the development be a member land of the Central Arizona Groundwater Replenishment District upon issuance of a Certificate of Assured Water Supply? ☐ Yes ☐ No
- 2.
  - a. Method of water distribution: ☐ central distribution system ☐ dry lot subdivision (individual wells)
  - b. If water is to be obtained from a water provider, include a "Notice of Intent to Serve" agreement and reference the attachment: \_\_\_\_\_
  - c. If provider's Certificate of Convenience and Necessity (CCN) has been modified to include this development, provide an updated copy of the map showing the CCN boundaries, and reference the attachment: \_\_\_\_\_
- 3. Has a water distribution system been constructed for this development? ☐ Yes ☐ No
- 4.
  - a. Generally describe any storage or treatment facilities (for surface water or effluent) which will serve this development. Indicate whether the facilities are planned or existing. If planned, indicate the anticipated completion date(s): \_\_\_\_\_  
\_\_\_\_\_
  - b. For any existing or planned storage or treatment facilities noted in "a" above, provide a statement of capacity certified by a registered professional engineer, and reference as an attachment: \_\_\_\_\_
  - c. If this development will not be a member land of the Central Arizona Groundwater Replenishment District upon issuance of a Certificate of Assured Water Supply, provide evidence that a performance bond has been posted for

the entire cost of any planned facilities indicated in "a" above, and reference as an attachment: \_\_\_\_\_

5. Include a map of the central distribution system and any on-site treatment or storage facilities and reference attachment: \_\_\_\_\_
6. a. Are any wells proposed to serve the development within one mile of a Water Quality Assurance Revolving Fund or Superfund site or monitor wells associated with such sites? ☐ Yes ☐ No
- b. Do any supplies proposed for this development fail to meet safe drinking water quality standards? ☐ Yes ☐ No
- c. If the response to either "a" or "b" above is "Yes," provide a study identifying and describing this water and reference the attachment: \_\_\_\_\_

7. Please indicate sources to be used:

Source of Supply	100 Year Volume (acre feet)	Required Supporting Information (reference any attached documents)
Surface Water Directly Delivered (except CAP or Colorado River Water) <i>(also include water stored and recovered in the same year, but not long-term storage credits)</i>		Hydrologic study demonstrating physical availability of water to be diverted (attachment): _____ Surface water right number(s) and type(s) or water district name: _____ Will a demonstration of backup supplies or a drought response plan be submitted? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, reference attachment: _____
CAP or Colorado River Water Directly Delivered <i>(also include water stored and recovered in the same year, but not long-term storage credits)</i>		Will a demonstration of backup supplies or a drought response plan be submitted? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, reference attachment: _____
Effluent Directly Delivered <i>(also include water stored and recovered in the same year, but not long-term storage credits)</i>		Name of entity providing effluent: _____ Any related contracts or agreements (attachment): _____
Groundwater <i>(Do not include storage project credits)</i>		Indicate any grandfathered groundwater right or permit number(s) and type(s): _____ Hydrologic study demonstrating physical availability of water to be withdrawn (attachment): _____
Existing Long-Term Storage Credits <i>(From all sources)</i>		Long-term storage credit account number: 70-_____ Hydrologic study demonstrating physical availability of water to be recovered from outside of the area of hydrologic impact (attachment): _____
Anticipated Long-Term Storage Credits <i>(From all sources)</i>		Water storage permit number: 73-_____ Existing? <input type="checkbox"/> Yes <input type="checkbox"/> No Water storage permit number: 73-_____ Existing? <input type="checkbox"/> Yes <input type="checkbox"/> No Hydrologic study demonstrating physical availability of water to be recovered from outside of the area of hydrologic impact (attachment): _____ Evidence of physical, legal and continuous availability of the water to be stored (attachment): _____

8. Indicate if the applicant at this time intends to claim an exemption for the withdrawal and use of:  
Poor quality water pursuant to a proposed remedial action: ☐ Yes ☐ No  
Water from an area exempt from conservation requirements due to waterlogging: ☐ Yes ☐ No
9. If a "Letter of Water Availability" has previously been issued for this property, provide a copy of the document and reference the attachment: \_\_\_\_\_
10. If the development will be receiving any water pursuant to an exchange agreement, provide a copy of the agreement and reference the attachment: \_\_\_\_\_
11. If grandfathered rights have been extinguished for dedication to this development, provide evidence and reference the attachment: \_\_\_\_\_

#### PART D - FEES

The application fee for an Analysis of Assured Water Supply is \$1,000. The payment may be made by cash, check, or in some cases, by entry in an existing Department fee credit account. Checks should be made payable to the Department of Water Resources. **Failure to enclose the required fees will cause the application to be returned.**

Fee for Application for Analysis of Assured Water Supply: \$1,000.00

**I DO HEREBY** certify that the information contained in this application and all information accompanying it is true and correct to the best of my knowledge and belief.

\_\_\_\_\_  
Owner Name (Please type or print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date